

**ABSTRACT**

An apparatus for retreading tires is disclosed. The apparatus has a rotatable hub for the mounting of a buffed tire casing. The apparatus also has a cushion gum applicator that is configured to stretch  
5 a length of cushion gum onto a tire casing. Further, the apparatus has a tread dispenser that is configured to automatically dispense a length of tire tread based on the circumference of at least one of the tire casing and the tire casing plus the cushion gum. Further still, the apparatus includes a tread applicator that is configured to stretch the length of tire tread onto  
10 the cushion gum. The entire apparatus including the cushion gum applicator, the tread dispenser, and the tread applicator are integrated into a single tire bench machine.

2025-04-27 09:45:10